

Federal Information Resources in Transition

**May 20-21
1986**



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Federal Information Systems and Services Conference

Federal Information Resources in Transition

**May 20-21, 1986
Bethesda, Maryland**

TUESDAY, MAY 20

- 8:30 a.m.- 9:15 a.m. Registration and Continental Breakfast
- Session 1** Welcome
The U.S. ADP Market
9:15 a.m.- 9:30 a.m. David Lipson, Senior Vice President, INPUT
INPUT Describes the Overall ADP Picture
- Session 2** Keynote Speech: Federal Market in the Late 1980s
9:30 a.m.-10:00 a.m. John Frank, Vice President, INPUT
INPUT Updates the Federal Information Technology Forecast
- 10:00 a.m.-10:15 a.m. Break
- Session 3** Government Office Information Systems
10:15 a.m.-11:00 a.m. Richard Greenstein, Director, Information Resources Management,
Department of the Treasury
Civil Agency Representative Describes Functional OIS Needs and
Gramm-Rudman
- Session 4** Federal Network Trends
11:10 a.m.-12:15 p.m. James Dolezal, Chief, Division of Telecommunications, Office of Informa-
tion Resources Management
Civil Agency Representative Discusses Networks Within and Outside FTS
- 12:15 p.m.- 1:30 p.m. Lunch
- Session 5** Ada Applications in Logistics and Administration
1:30 p.m.- 2:30 p.m. Colonel Philip A. Walker, Jr., Deputy Commander, U.S. Army Information
Systems Engineering Command
DOD Representative Identifies Ada Applications Beyond Embedded
Computers
- 2:30 p.m.- 2:45 p.m. Break
- Session 6** Connectivity Trends in Large Federal Agencies
2:45 p.m.- 3:45 p.m. John Turner, Director, Office of Information Systems Telecommunications,
Department of Transportation
Civil Agency Representative Reviews Trends in Various Agency Scenarios
- 3:45 p.m.- 5:30 p.m. Cocktails

WEDNESDAY, MAY 21

8:45 a.m.- 9:15 a.m. Continental Breakfast

Session 8

Procurement Policy and Regulation

9:15 a.m.-10:15 a.m.

Walter O'Neill, Industry Representative

Industry Observer Examines Latest Trends and Issues

10:15 a.m.-10:30 a.m.

Break

Session 9

End-User Computing Trends

10:30 a.m.-11:30 a.m.

Irene Bayol, Policy Officer, Office of the Deputy Commissioner for Federal Information Resource Management, General Services Administration

Civil Agency Representative Examines the Trends in the Use of Micro-computers by End Users

Session 10

FISSP Dialogue: INPUT Research Directions

11:30 a.m.-12:00 p.m.

Charles Waser, Senior Consultant, INPUT

Conference Wrap-up

12:00 p.m.- 1:00 p.m.

Lunch

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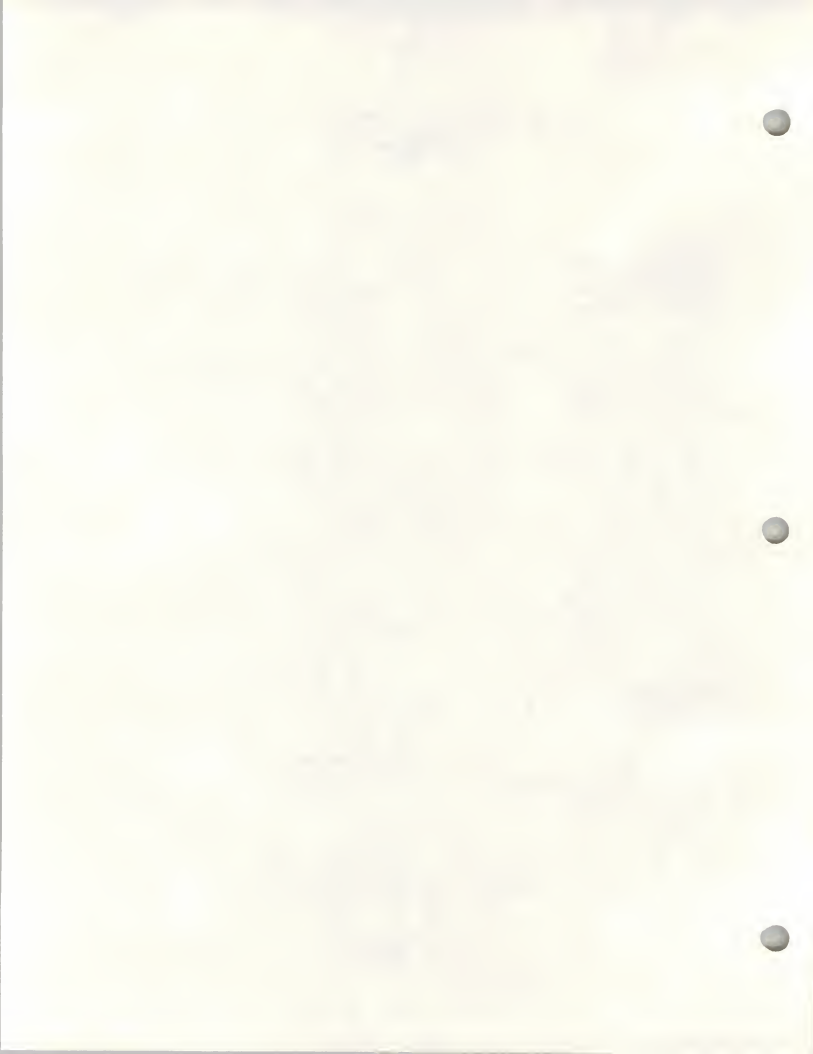
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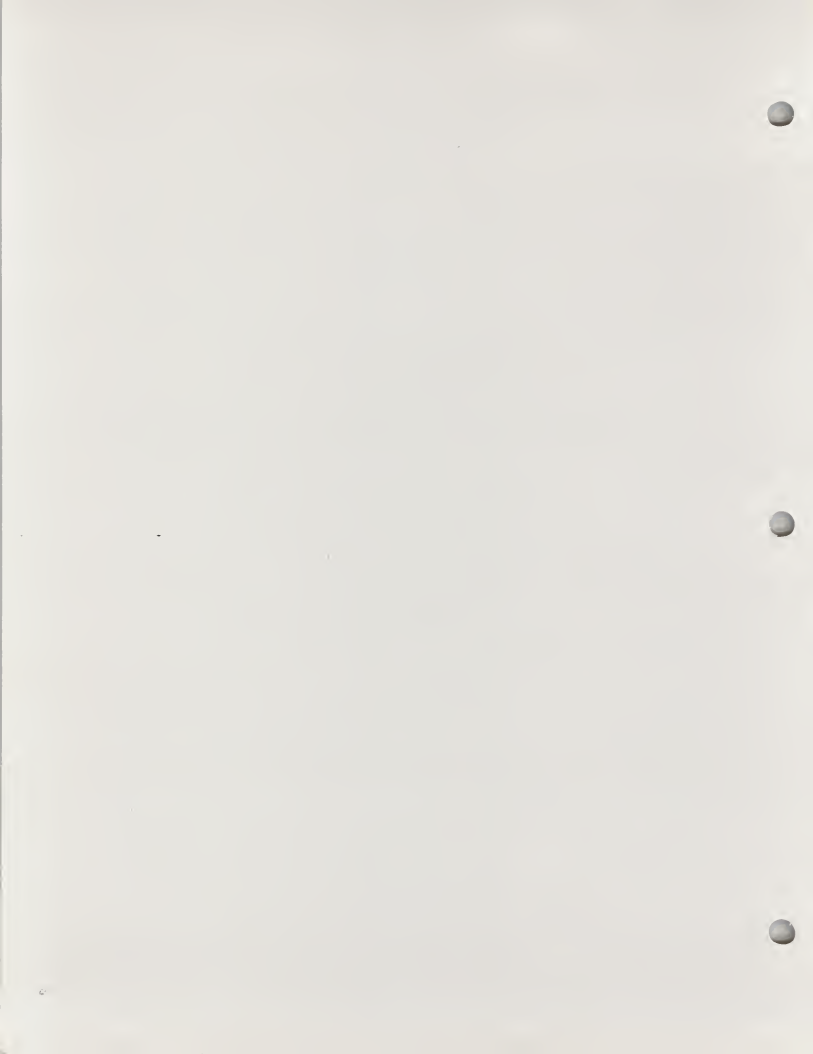
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**INFORMATION SERVICES
INDUSTRY**

**David Lipson
Senior Vice President
INPUT**



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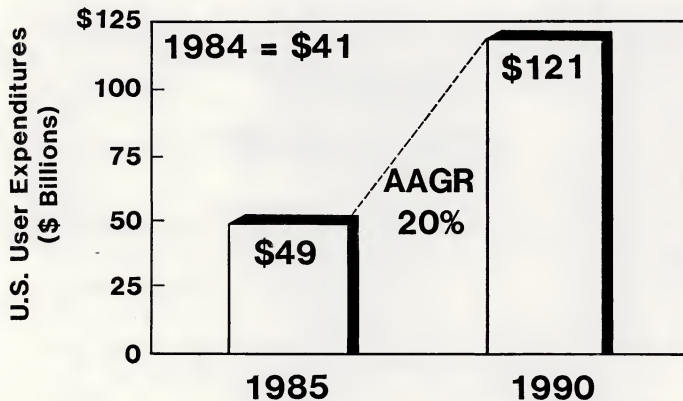
STATE OF THE INDUSTRY

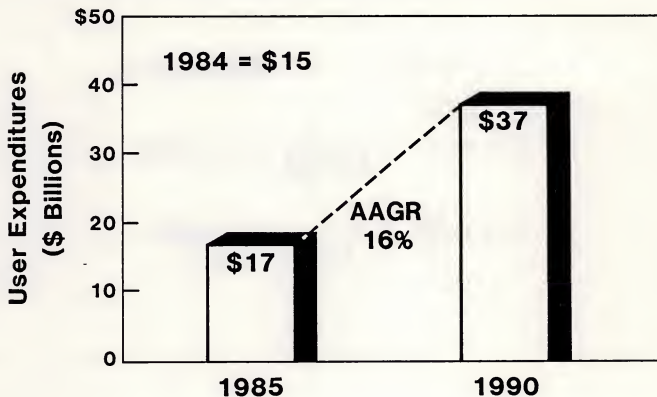
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**BUYING DECISION
SLOWING DOWN**

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MARKET FORECASTS

TOTAL INFORMATION SERVICES

PROCESSING SERVICES MARKET

DIRECTION

Single Site

Multi-Site

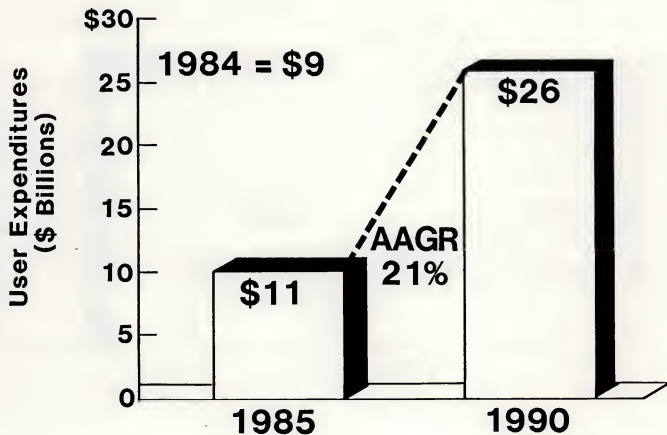
Simple

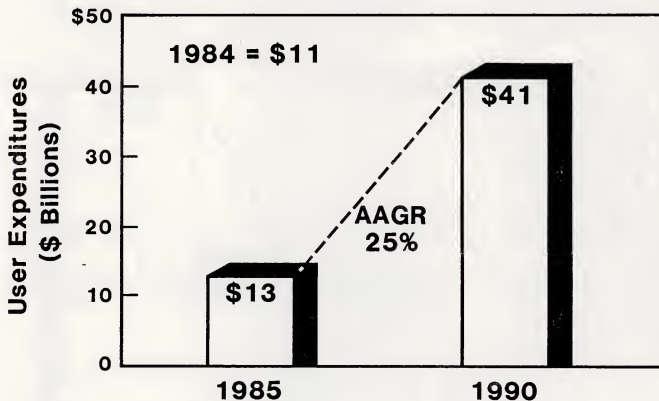


Complex

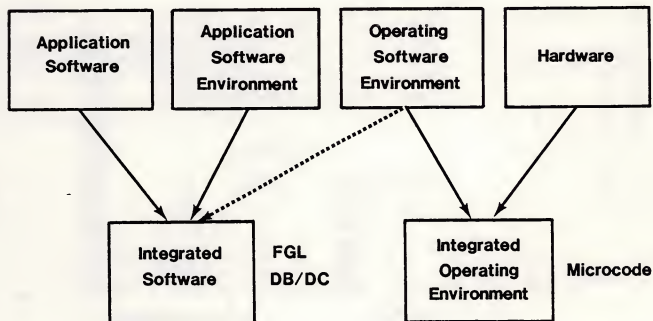
General

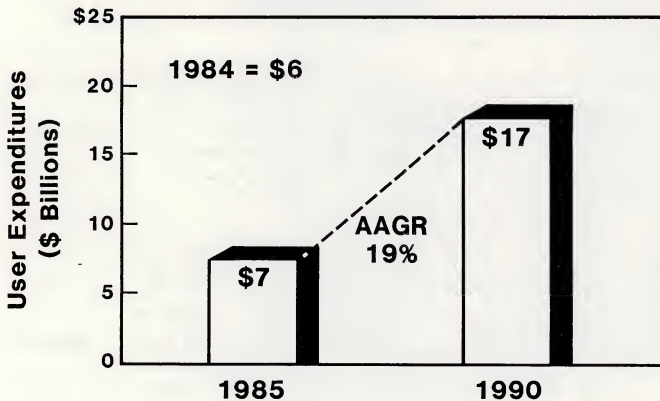
Specific

PROFESSIONAL SERVICES MARKET

SOFTWARE PRODUCTS MARKET

HARDWARE/SOFTWARE RELATIONSHIPS 1985-1995



TURNKEY SYSTEMS MARKET

TURNKEY SYSTEMS PROJECTIONS

- **Standard Hardware (VAR)**
 - **Faster Growth Now**
 - **Custom Hardware
(Integrated Systems)**
 - **Eventual Growth Faster**
 - **“Lock-ins”**
-

LIMITS TO GROWTH

- **Absorption Rate**
 - **Implementation**
 - **Education and Training**
 - **Organization Changes**
 - **Resistance to Change**
 - **Logistics**
-

David S. Lipson

David Lipson is a Senior Vice President with INPUT. He has 18 years of sales and marketing management experience in the remote computer services and software industries. His background includes executive responsibility at SIS Sundata where he was President of the Project Management Services Division. Most recently, Mr. Lipson was a founding member and Chief Operating Officer of the National Software Testing Labs.

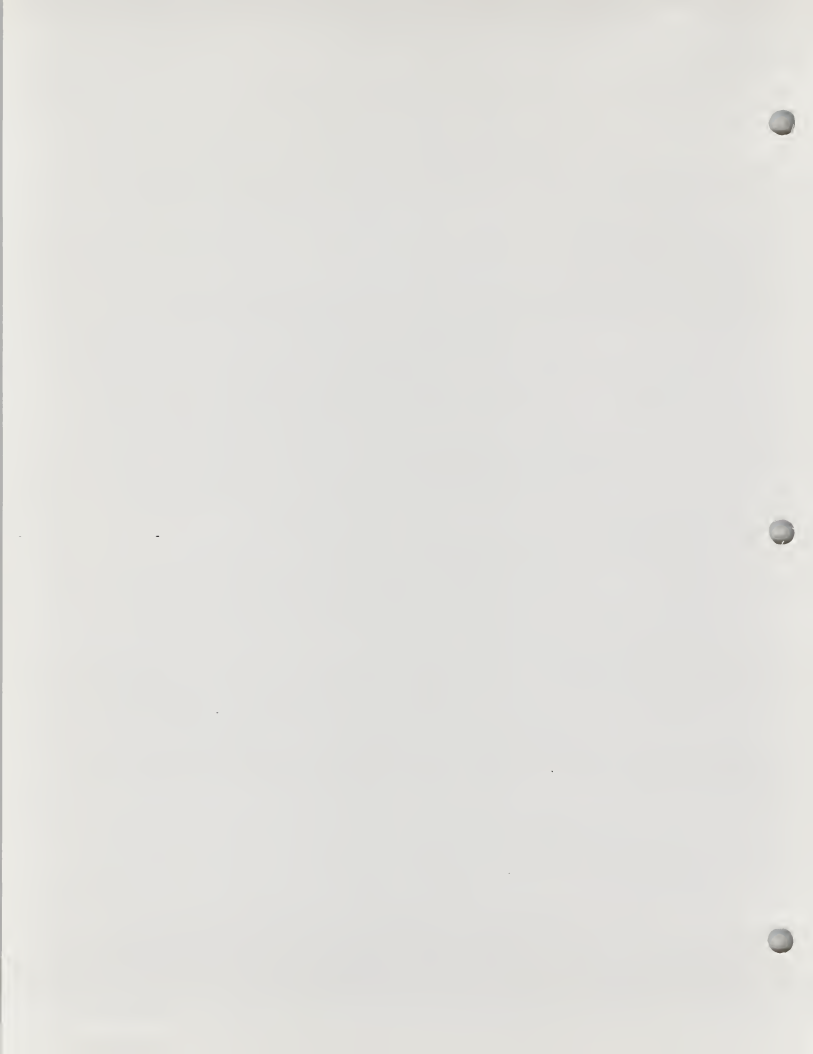
Mr. Lipson holds a B.A. degree from Pennsylvania State University and received his M.B.A. from Temple University.



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**FEDERAL GOVERNMENT MARKET
GFY 1986-1991**

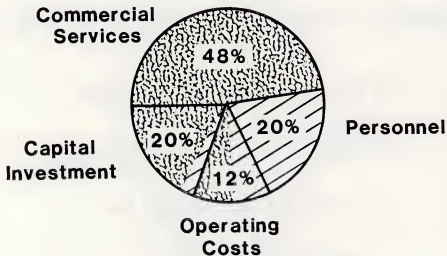
**John E. Frank
Vice President
INPUT**



FEDERAL GOVERNMENT MARKET FACTORS

- **Reduced Inflation Rate**
 - **Deficit Control Measures**
 - **Gramm-Rudman Act**
 - **Tax Reform**
 - **Moderate GNP Rate**
 - **Acquisition Reforms**
-

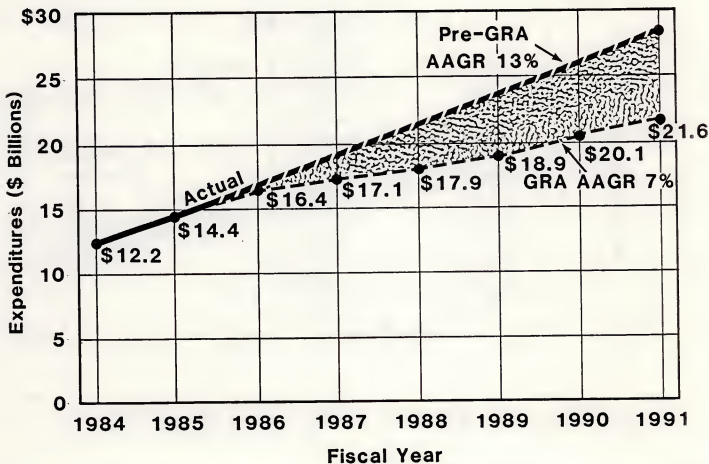
INFORMATION TECHNOLOGY BUDGET FY87



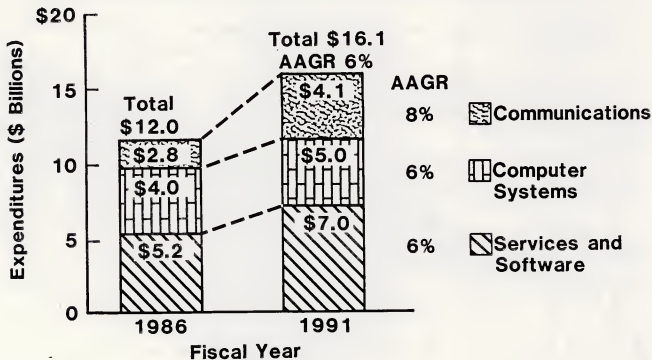
Obligations - \$17.1 Billion
Contracts - \$12.5 Billion (73%)

▣ External Contracts ▤ In-House

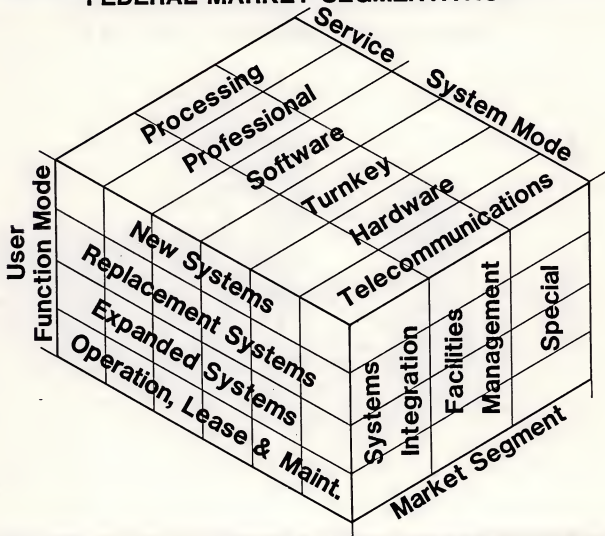
GRAMM-RUDMAN IMPACT ON FORECAST



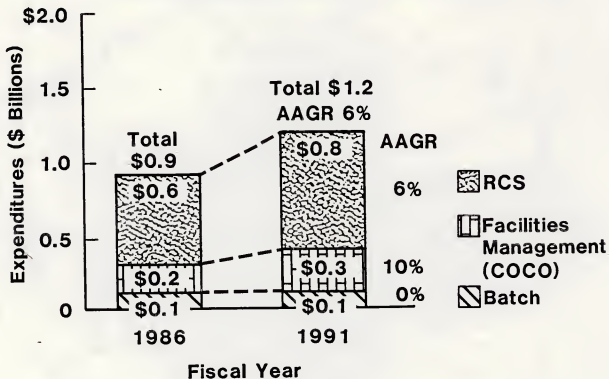
INFORMATION TECHNOLOGY MARKET



FEDERAL MARKET SEGMENTATION



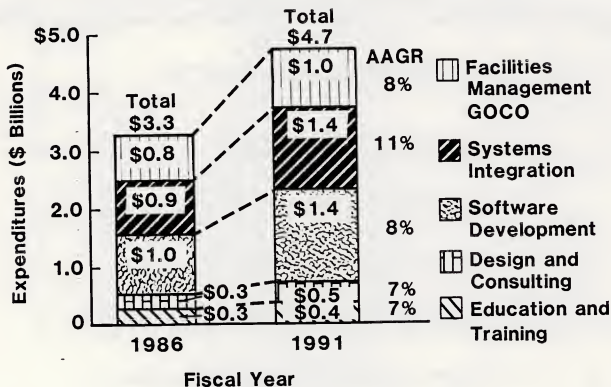
PROCESSING SERVICES MARKETS



PROCESSING SERVICES

- **GSA-TSP/MAS Decline**
 - **Batch Mode Decline in 1990s**
 - **Large HCFA Component**
 - **Distributed Processing Prospects**
 - **Value Added Networks Prospect**
-

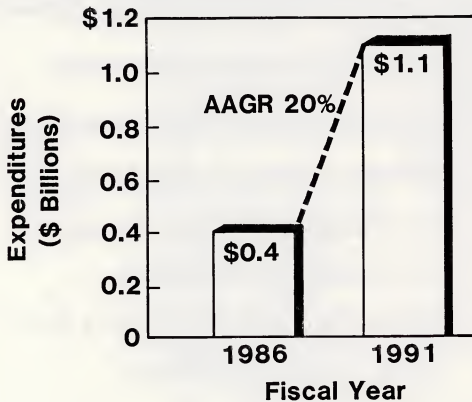
PROFESSIONAL SERVICES MARKET



PROFESSIONAL SERVICES

- **Growth Supports ADP Rebuilding**
 - **Gramm-Rudman Impacts Growth**
 - **Technical Support**
 - **Training and Education**
 - **Maintains Existing Software Base**
 - **New Technical Solutions**
-

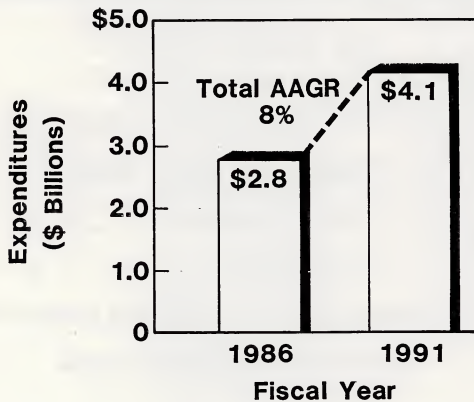
SOFTWARE PRODUCTS MARKET



SOFTWARE PRODUCTS

- **Changing Acquisition Practices**
 - **Technical and Data Rights**
 - **Copy Protection**
 - **Site Licenses**
 - **Benchmark and Support Requirements**
 - **Software Productivity Tools**
-

TELECOMMUNICATIONS MARKET



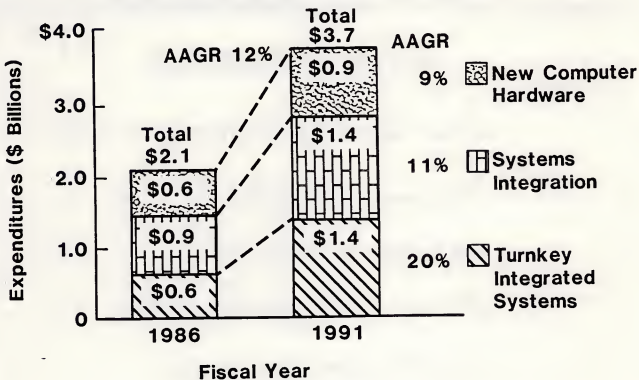
TELECOMMUNICATIONS

- **Voice/Data Integration**
 - **New Technology Acceptance**
 - **Post-Divestiture Support**
 - **Systems Integration Preference**
 - **FTS 2000 Reservations**
-

FACILITIES MANAGEMENT

- **Cross Service Modes Segment**
 - **PFM/COCO AAGR 10%**
 - **PSFM/GP GOCO AAGR 8%**
 - **1991 - \$1.4 Billion**
 - **Gramm-Rudman Threat**
-

SYSTEMS INTEGRATION MARKET



SYSTEMS INTEGRATION

- **Custom Hardware/Software Projects**
 - **Telecommunications**
 - **End-User Involvement**
 - **Post-Implementation Support**
 - **Risk Reduction Contracts**
-

INTEGRATED (TURNKEY) SYSTEMS

- **Packaged Hardware/Software Products**
 - **CAD/CAM/CIM Systems**
 - **Training and Simulation**
 - **Graphics and Mapping**
 - **Financial and Budget Systems**
-

OFFICE INFORMATION SYSTEMS

- Requirements Contracts
 - Standards Evolution
 - Software/Hardware Acquisition Policies
 - Tiered Networks
 - Security and Privacy Issues
-

FEDERAL MARKET ISSUES

- **FIRMR Amendments**
 - **Defense Acquisition Reforms**
 - **OMB Circulars A76 and A130**
 - **Competition in Contracting Act**
 - **Congressional Micro-Management**
-

CONCLUSIONS

- Data to Information Transition
 - Integrators Needed:
 - ADP
 - Communications
 - Federal Data Center Competition
 - Price versus Technology
 - Bottom-Line Justification
-

John E. Frank

John E. Frank, a Vice President with INPUT, has had over 37 years of experience in the information industry in management and engineering, technology and business forecasting, and marketing, with an emphasis on systems communications and the federal government. He was most recently Director of Planning and Administration at Computer Sciences Corporation's Systems Group, with responsibility for research and preparation of mid- and long-range market plans and business forecasts. Prior posts include Associate Director with ITT Communications Systems, Inc., Project Engineer with Reaction Motors, Inc./Thiokol Chemical Corporation, Electronic Engineer with the U.S. Air Force, and Communications Engineer with Western Electric.

Mr. Frank holds a B.S. in Industrial Engineering and Management from Fairleigh Dickinson University and has done advanced studies at George Washington University and the University of Michigan. He is a registered Professional Engineer and member of several professional societies.



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**GOVERNMENT OFFICE
INFORMATION SYSTEMS**

**Richard Greenstein
Director, Information Resources Management
Department of the Treasury**



FEDERAL INFORMATION RESOURCES IN TRANSITION

ISSUES IN THE TREASURY DEPARTMENT

RICHARD A. GREENSTEIN
DIRECTOR, OFFICE OF INFORMATION
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DEPARTMENT OF THE TREASURY

REVENUE COLLECTION
FINANCIAL MANAGEMENT
LAW ENFORCEMENT
MANUFACTURING
POLICY SETTING

STAGES OF INFORMATION SYSTEMS

INITIATION:

FED. LAW ENFORCEMENT TRAINING CENTER
BU. OF ALCOHOL, TOBACCO & FIREARMS
COMPTROLLER OF THE CURRENCY
BU. OF ENGRAVING & PRINTING

MODERNIZATION:

BU. OF PUBLIC DEBT
FINANCIAL MANAGEMENT SERVICE

INNOVATION:

CUSTOMS SERVICE
INTERNAL REVENUE SERVICE

A NEW GENERATION OF SYSTEMS

ON-LINE -- COMMUNICATIONS-DEPENDENT
ELECTRONIC FUNDS TRANSFER
AUTOMATED BROKER INTERFACE
ELECTRONIC FILING OF TAX RETURNS

CONCERNS

SECURITY

OPERATIONS

CONTINGENCY PLANNING

AUTHENTICATION vs ENCRYPTION

PRODUCTIVITY

OF PROFESSIONALS

OF SOFTWARE TECHNICIANS

IN MISSION PERFORMANCE

IN SUMMARY:

WHAT CAN YOU DO FOR US?

SHOW US WHERE STATE-OF-THE-ART
TECHNOLOGY CAN TAKE US --

TO IMPROVE THE WAY WE DO BUSINESS

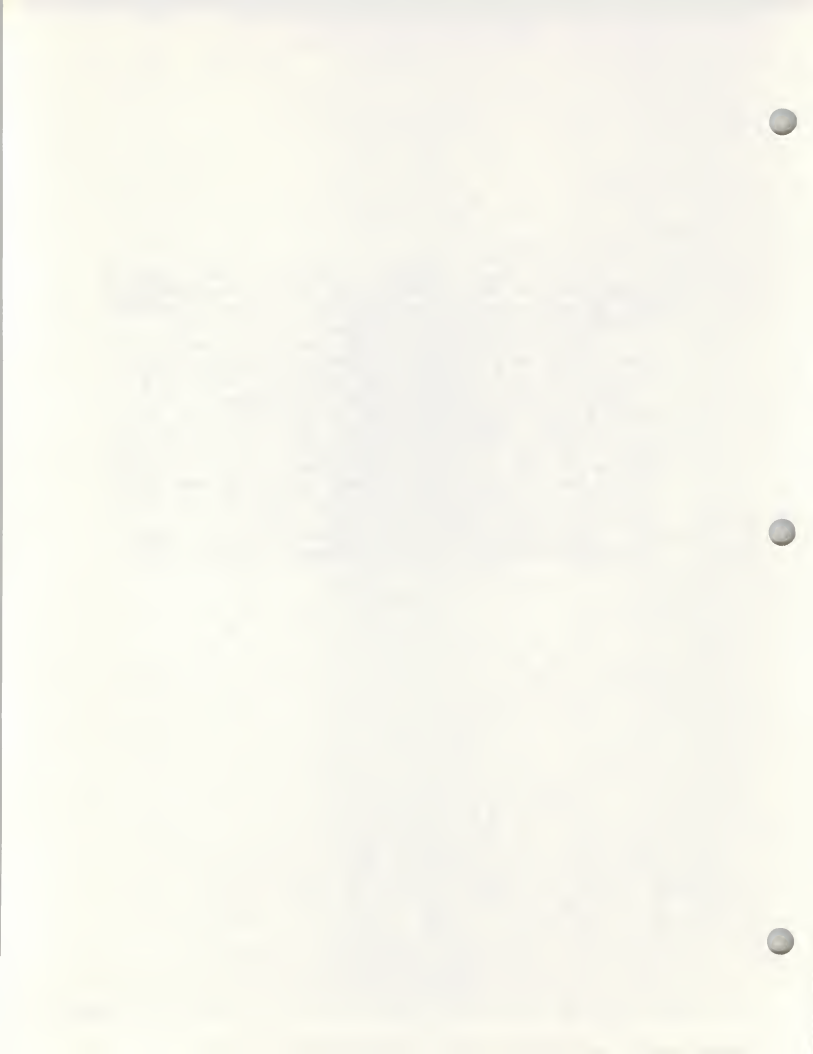
Richard A. Greenstein

Mr. Greenstein is the Director of the Office of Information Resources Management in the Office of the Secretary of the Treasury where he is responsible for policy and planning relating to the acquisition and operation of information technology within the Department of the Treasury.

Prior to his present assignment, Mr. Greenstein was Director of the Working Capital Group in the Financial Management Service, and responsible for the Government's cash management, credit administration, and worldwide banking relationships involving average daily cash flows of almost \$8 billion. He previously directed the highly successful Reform '88 Cash Management Program.

Mr. Greenstein has almost 30 years of Federal Government service and has received a number of performance awards. He began his career with the Social Security Administration and in 1960 joined the Internal Revenue Service. While with the IRS, Mr. Greenstein served as Assistant Regional Commissioner in the Mid-Atlantic Region in Philadelphia, and as Technical Advisor to the Assistant Commissioner for Computer Services in the National Office.

Mr. Greenstein received his B.A. in Political Science from the University of Delaware in 1955 and his M.A. from the University of Pennsylvania in 1961.



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FEDERAL NETWORK TRENDS

James E. Dolezal
Chief, Division of Telecommunications
Office of Information Resources Management
U.S. Department of the Interior



TELECOMMUNICATIONS REQUIREMENTS
OF THE
DEPARTMENT OF THE INTERIOR

- I. THE INTERIOR ORGANIZATION
 - A. MISSION
 - B. A DECENTRALIZED WESTERN AGENCY
 - C. BUREAU MANAGEMENT
- II. CURRENT TELEPHONE SERVICES AND FACILITIES
 - A. FTS INTERCITY VOICE NETWORK
 - B. WATS AND MTS/DDD
 - C. LOCAL SERVICES
- III. CURRENT DATA COMMUNICATIONS SERVICES
 - A. MULTIPLE PRIVATE NETWORKS
 - B. DIAL-UP VAN, FTS, AND MTS/DDD SERVICES
- IV. STRATEGIC DIRECTION
 - A. SCENE FOR DATA COMMUNICATIONS
 - B. UPGRADE TELEPHONE SYSTEMS TO DIGITAL SERVICES
 - C. DEPEND ON INDUSTRY/GSA TO PROVIDE TRANSMISSION ECONOMIES
- V. FUTURE
 - A. KNOW REQUIREMENTS
 - B. HAVE FLEXIBILITY

U.S. DEPARTMENT OF THE INTERIOR

MISSION

AS THE NATION'S PRINCIPAL CONSERVATION AGENCY, THE DEPARTMENT OF THE INTERIOR HAS RESPONSIBILITY FOR MOST OF OUR NATIONALLY OWNED PUBLIC LANDS AND NATURAL RESOURCES. THIS INCLUDES FOSTERING THE WISEST USE OF LAND AND WATER RESOURCES, PROTECTING OUR FISH AND WILDLIFE, PRESERVING THE ENVIRONMENT AND CULTURAL VALUES OF OUR NATIONAL PARKS AND HISTORICAL PLACES, AND PROVIDING FOR THE ENJOYMENT OF LIFE THROUGH OUTDOOR RECREATION. THE DEPARTMENT ASSESSES THE DEVELOPMENT OF OUR MINERAL RESOURCES AND HAS A MAJOR RESPONSIBILITY FOR AMERICAN INDIAN RESERVATION COMMUNITIES AND FOR PEOPLE WHO LIVE IN ISLAND TERRITORIES.

FACILITIES

THE JURISDICTION OF THE DEPARTMENT OF THE INTERIOR INCLUDES THE ADMINISTRATION OF OVER 550 MILLION ACRES OF FEDERAL, INDIAN, AND TRUST TERRITORY LANDS. OFFICES AND BUREAUS OF THE DEPARTMENT OF THE INTERIOR ARE LOCATED IN NEARLY 2000 LOCATIONS IN THE 50 STATES, THE DISTRICT OF COLUMBIA, PUERTO RICO, THE VIRGIN ISLANDS AND U.S. TERRITORIES IN THE PACIFIC.

EMPLOYEES

75,035

U.S. DEPARTMENT OF THE INTERIOR
BUREAUS

NATIONAL PARK SERVICE

U.S. FISH AND WILDLIFE SERVICE

BUREAU OF INDIAN AFFAIRS

BUREAU OF LAND MANAGEMENT

OFFICE OF SURFACE MINING

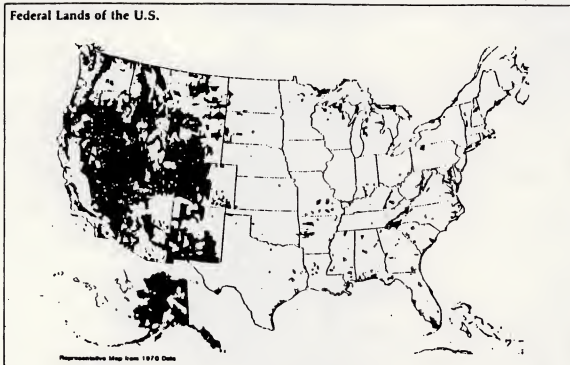
MINERALS MANAGEMENT SERVICE

U.S. GEOLOGICAL SURVEY

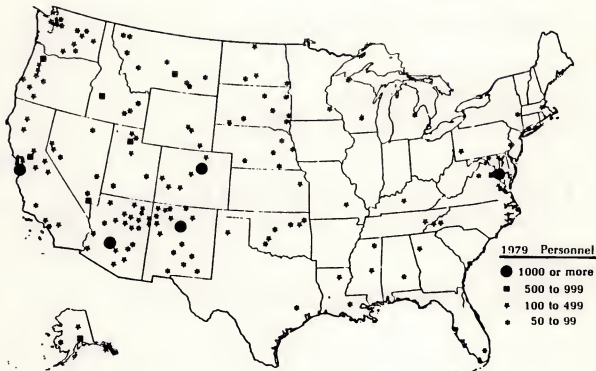
BUREAU OF RECLAMATION

BUREAU OF MINES

Federal Lands of the U.S.



U.S. Department of the Interior
Primary Office Locations



TELECOMMUNICATIONS MANAGEMENT ORGANIZATION

BUREAUS

- SEPARATE MANAGEMENT AREAS FOR:
 - RADIO
 - TELEPHONE SYSTEMS
 - DATA COMMUNICATIONS NETWORKS
- ORGANIZED FOR MISSION AND PROGRAM EFFICIENCY AND EFFECTIVENESS
- FUNDED THROUGH SEPARATE APPROPRIATION ORGANIZATIONS
- MOST CONCENTRATE ACTIVITIES IN THE WESTERN STATES
- HEAVY CONCENTRATION OF RADIO SYSTEMS IN REMOTE AREAS
- MANY EXCLUSIVE USE SWITCHBOARDS AND DATA NETWORKS

DIGITAL TELEPHONE SWITCH UPGRADES

METAIRIE, LA (MMS)

MENLO PARK, CA (USGS)

WASHINGTON, DC (DOI)

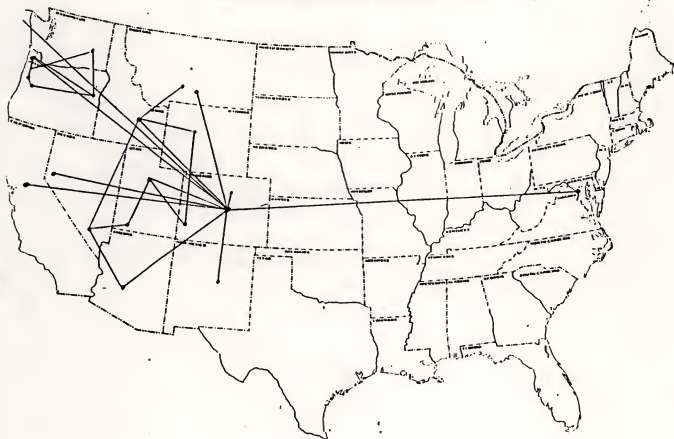
DENVER, CO (GSA/DOI)

TELEPHONE SERVICES AND FACILITIES
(FY 1985 ESTIMATES)

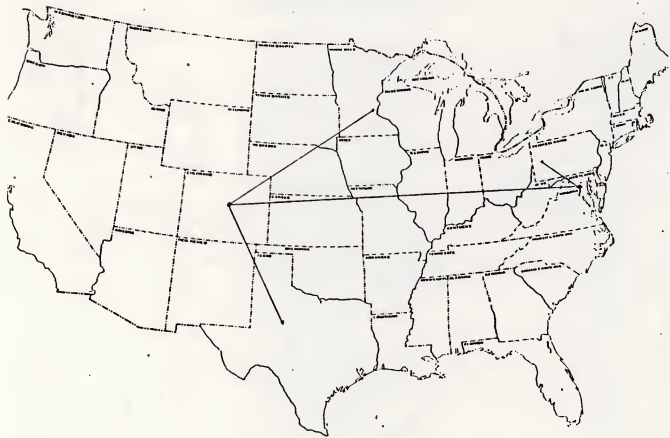
<u>OFFICE/BUREAU</u>	<u>FTS INTERCITY</u>	<u>AT&T WATS</u>	<u>AT&T TOLL</u>	<u>LOCAL SERVICE</u>
OFFICE OF THE SECRETARY	\$1,103,000	-	-	-
NATIONAL PARK SERVICE	3,073,000	-	-	-
FISH AND WILDLIFE SERVICE	2,604,000	-	-	-
BUREAU OF INDIAN AFFAIRS	2,980,000	-	-	-
BUREAU OF LAND MANAGEMENT	1,959,000	-	-	-
OFFICE OF SURFACE MINING	248,000	-	-	-
MINERALS MANAGEMENT SERVICE	183,000	-	-	-
GEOLOGICAL SURVEY	4,144,000	-	-	-
BUREAU OF RECLAMATION	1,666,000	-	-	-
BUREAU OF MINES	<u>670,000</u>	<u>-</u>	<u>-</u>	<u>-</u>
TOTAL	\$18,630,000	\$1,016,000	\$2,918,000	\$22,500,000*

* \$25/MONTH X 12 MONTH/YEAR X 75,000 EMPLOYEES = \$22,500,000/YEAR

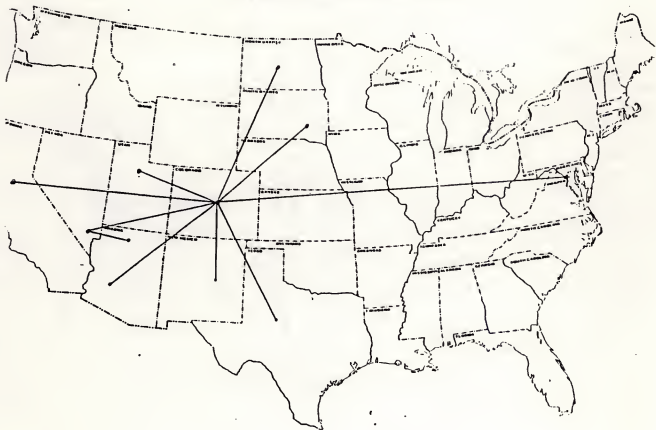
BUREAU OF LAND MANAGEMENT



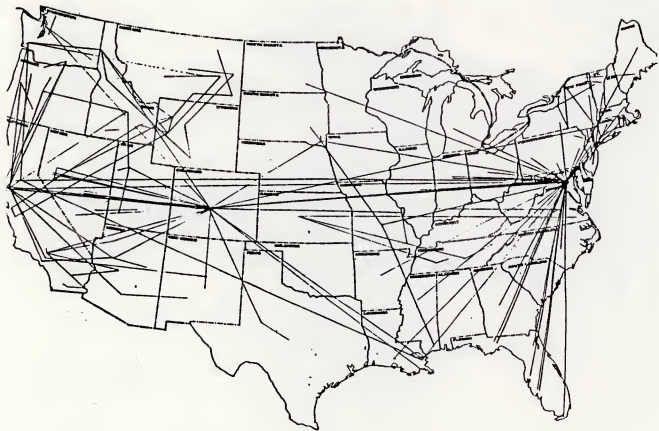
BUREAU OF MINES



BUREAU OF RECLAMATION



U.S. GEOLOGICAL SURVEY





FY 1985 ESTIMATED
TELECOMMUNICATIONS COSTS

RADIO COMMUNICATIONS SYSTEMS

FACILITY VALUATION	\$1,000,000.000
ANNUAL COSTS	\$10,000,000

TELEPHONE SYSTEMS AND SERVICES

OWNED SWITCH VALUATION	\$11,000,000
ANNUAL COST	
FTS INTERCITY	\$18,630,000
AT&T TOLL	2,918,000
AT&T WATS	1,016,000
LOCAL SERVICES	<u>22,500,000</u>
	\$45,064,000

DATA COMMUNICATIONS NETWORK SERVICES

OWNED EQUIPMENT VALUATION

ANNUAL COSTS

INTERSTATE AT&T PRIVATE/FX LINES	\$3,450,000
INTRASTATE AT&T PRIVATE LINES	744,000
VALUE ADDED NETWORK SERVICES	4,000,000
LEASED MODEMS/MULTIPLEXERS	<u>65,000</u>
	\$8,869,000

GEONET Features

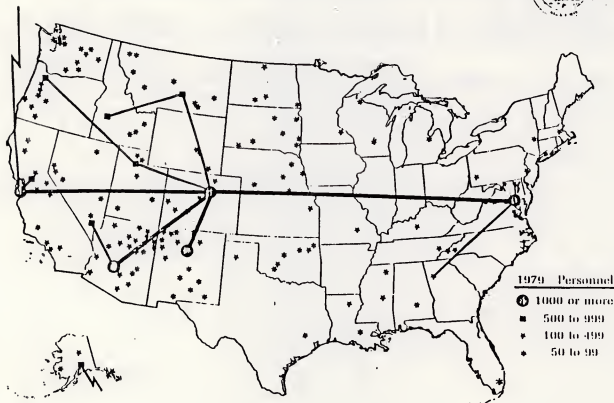
- X.25 Interface
- Packet Switching
- Nationwide Service
- 800 (Wats) Service
- 24 Hour Maintenance
- Network Control Center
- Single Point of Contact
- Rapid Response to Changing Needs
- Value Engineering
- Voice Potential (Future)

STRATEGIC DIRECTIONS

- FORMULATE AN INTEGRATED TELECOMMUNICATIONS PROGRAM
- IMPROVE THE USE OF PERSONNEL, FISCAL, AND SKILL RESOURCES
- ESTABLISH GUIDELINES TO PROVIDE INFORMATION REGARDING TELECOMMUNICATIONS FACILITY/RESOURCES COSTS, UTILIZATION, EFFECTIVENESS, AND AUDITABILITY/ACCOUNTABILITY
- FORMALIZE THE PLANNING PROCESS
- DOCUMENT MULTI-YEAR DEVELOPMENT AND BUDGETING PROJECTS
- PROMULGATE STANDARDS TO IMPROVE INTERCONNECTIVITY AND COORDINATED ACQUISITION EFFORTS
- ESTABLISH FORMAL FISCAL AND PERSONNEL FUNCTIONS RELATING TO TELECOMMUNICATIONS ACTIVITIES
- DEVELOP ORGANIZATIONAL AND FUNCTIONAL AREAS OF RESPONSIBILITY AND ACCOUNTABILITY IN THE DEPARTMENT AND BUREAUS
- ESTABLISH COST RECOVERY AND CHARGE-BACK ALGORITHMS FOR DEPARTMENT-WIDE APPLICATION
- DEVELOP LAYERED TRAINING PROGRAMS TO ENHANCE THE SKILL LEVELS OF PERSONNEL
- PROMOTE THE INTEGRATION AND SHARING OF INTER-CITY COMMUNICATIONS CHANNELS

- PROVIDE MULTIPLE USER CONCENTRATION CAPABILITIES
- ENHANCE OPERATIONAL AND UTILIZATION MANAGEMENT FUNCTIONS
- IMPROVE MAJOR CENTER AND INDIVIDUAL LOCATION SWITCHING AND MANAGEMENT INFORMATION CAPACITY
- DEVELOP SUPPORT FOR UNIVERSALLY USED APPLICATIONS/SERVICES
- IMPROVE THE SUPPORT SERVICES FOR SPECIFIC MISSIONS OR PROGRAMS

U.S. Department of the Interior
 Future Integrated Voice/Data T1 Carrier Backbone Network



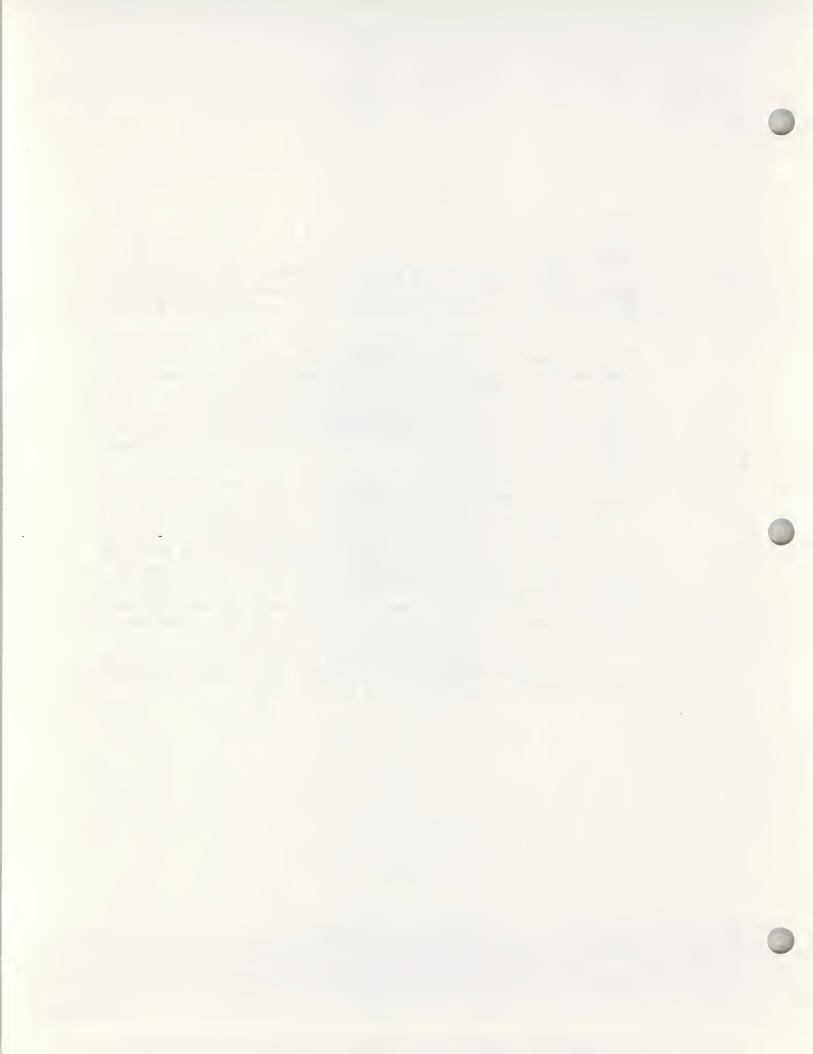
James E. Dolezal

Mr. Dolezal is Chief, Division of Telecommunications Office of Information Resources Management, responsible for Interior Department telecommunications planning, analysis, design, and implementation of telephone, data, and radio communication services.

He began his career in telecommunications as shipboard communications system design engineer at the Naval Ship Engineering Center, designing shipboard communications systems, participating in the development of the Navy's first shipboard computer controlled communications switching system, and providing leadership in the implementation of a Communications System Operational Test Program. As a communications engineer with the Defense Communications Agency in Stuttgart, Germany, he designed and implemented telecommunication networks throughout the European Continent.

In 1978 he joined the Data Engineering Branch of the General Services Administration, optimizing data communications network designed and evaluating tariffed carrier offerings as they applied to Federal users. In procuring Value-Added Network (VAN) services, he initiated an innovative procurement method for obtaining such services and implemented the Centralized VAN Billing Program which allowed agencies the maximum economy of scale benefits from tariffed volume discounts. When the Selective Service System was revitalized in 1980, he became their Telecommunications Manager, designing and implementing a national telecommunications network to satisfy their increased mission requirements due to the reinstatement of peacetime registration.

Mr. Dolezal has a B.S.E.E. degree from the Illinois Institute of Technology and an M.B.A. degree from the University of Utah. He is a registered Professional Engineer in the District of Columbia.



**ADA APPLICATIONS IN
LOGISTICS AND
ADMINISTRATION**

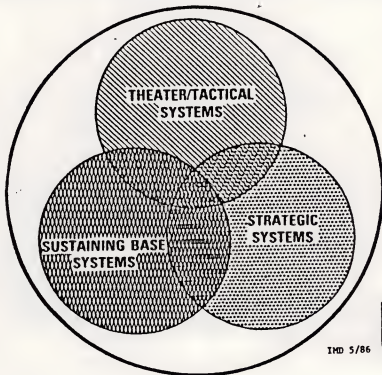
**Colonel Philip A. Walker, Jr.
Deputy Commander
U.S. Army Information Systems
Engineering Command**





USAISEC

THE ARMY INFORMATION PROGRAM



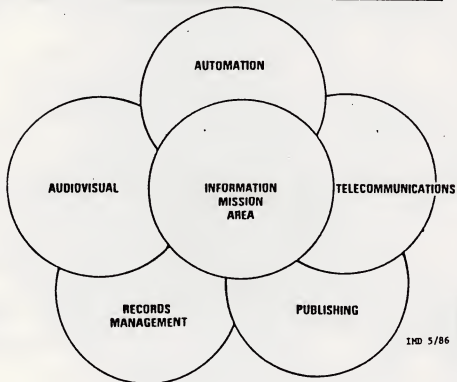
IMD 5/86





USAISEC

INFORMATION MISSION AREA



IND 5/86

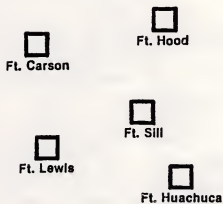




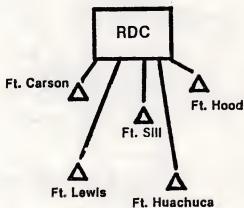
USAISEC

PROCESSING CAPABILITIES

BASOPS



VIABLE

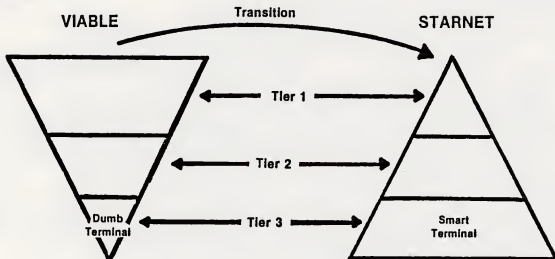


INPUT



USAISEC

PROCESSING CAPABILITIES



INPUT

RELATED CHALLENGES

Corporate data base
Data element standards
Data design structure
Optimization data model
Standard operating systems
Development tools
Controls





USAISEC

BASIC FUNCTIONS

Structure

Man

Train

Equip

Finance

Move

Support

Command





USAISEC

ASSUMPTIONS

Standard DBMS

Standard OS

ADA and 4th Generation Language

PA Functional Data Admin

DA Priority





USAISEC

COMMAND

<u>SYSTEM</u>	<u>INTERFACE</u>	
	<u>ISEC STAMMIS</u>	<u>OTHER</u>
1. Combat System Support Control System (CSSCS)	SARSS 2A/2B/3	MCS
	SAMS I, II	I/EW
	DAMMS-R	AFATDS
	SAAS-4	SHORADC2
	SIDPERS III	TAMMIS
	SPBS-R	
	ULLS	

Comments: System to be developed from the beginning
using Ada and 4th Generation Languages.



INPUT



USAISEC

Ada in ISEC: Implementation Approach

Implement Ada programming language through ---

1. Acquiring — Software support capabilities
2. Evolving — Ada based software engineering
3. Training — Managers, analysts and programmers
4. Projecting — Across—the—board evolution by 1995
5. Formulating — Metrics for productivity, quality and
cost control
6. Undertaking — Pilot software development projects





USAISEC

Ada in ISEC: Strategic Concepts

- 0 Ada is a software technology --- not just a new programming language
- 0 Ada propels the STAMMIS Modernization Program
- 0 Ada disciplines Information Systems life-cycle support, but is not a panacea
- 0 Keys to realizing Ada's tremendous potential :
 - Improve the human resource
 - Improve the availability and use of software tools



Foundation Project: Software Engineering Support Environment

- o Define Software Engineering methods for Information Systems lifecycle support (SofTech, Inc.)**
- o Provide support environment architecture and implementation (Teledyne Brown Engineering)**

Foundation Project: APSE Evaluation Methods

- o Army WWMCCS Information System (AWIS) initiative**
- o Provides quantifiable, generic criteria for evaluating commercial APSEs**
- o Criteria to be applied to existing APSEs**
- o Software Engineering Institute (SEI) is contractor**

Foundation Project: Ada Interface with Commercial DBMS

- o Extend WWMCCS Information System (WIS) Ada/SQL**
- o Develop procedures and examples keyed to Army Information System requirements**
- o Procedures targeted to DATACOM/DB**
- o Massachusetts Computer Associates (ADR subsidiary) is contractor**



USAISEC

Foundation Project: Reusable Ada Packages for Information Systems Development (RAPID)

- o Define generic Information System architecture**
- o Design reusable software components**
- o Develop procedures for managing repository of reusable components**
- o Proof of concept in combat service support functional systems**
- o SofTech, Inc. is contractor**



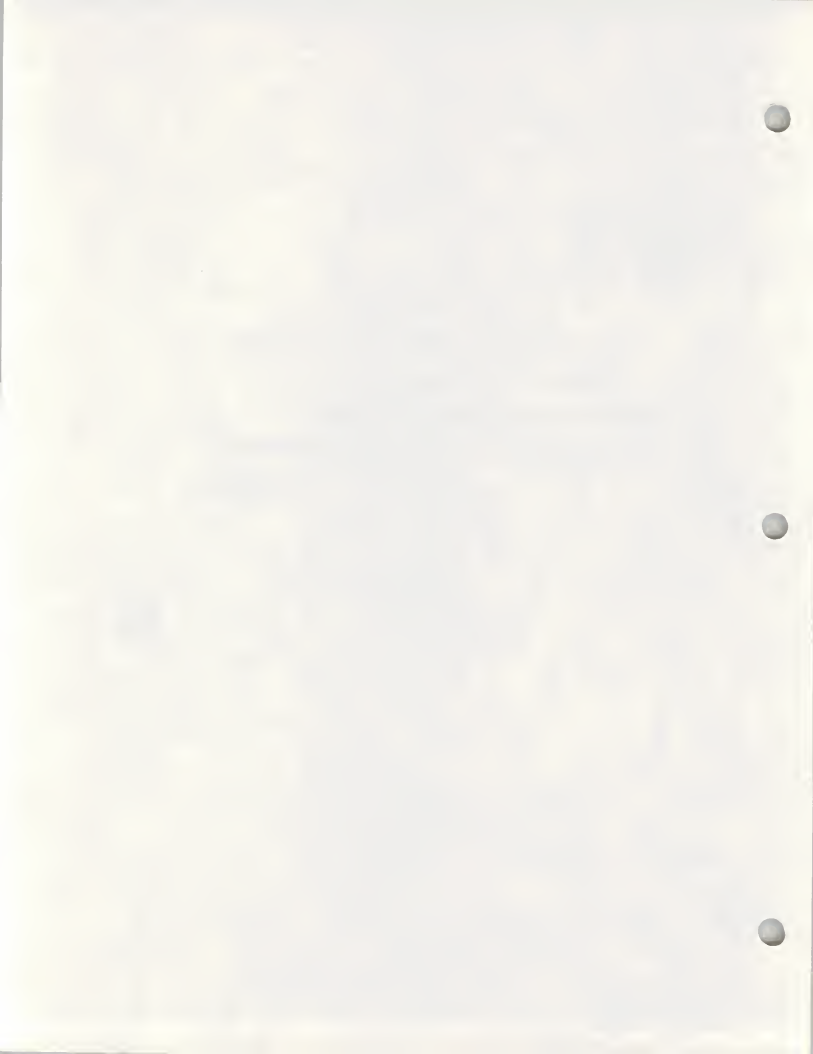


USAISEC

**“There is nothing more difficult to plan,
More uncertain of success,
Nor more dangerous to manage,
Than creation of a new order of things.”**

Machiavelli





Colonel Philip A. Walker, Jr.

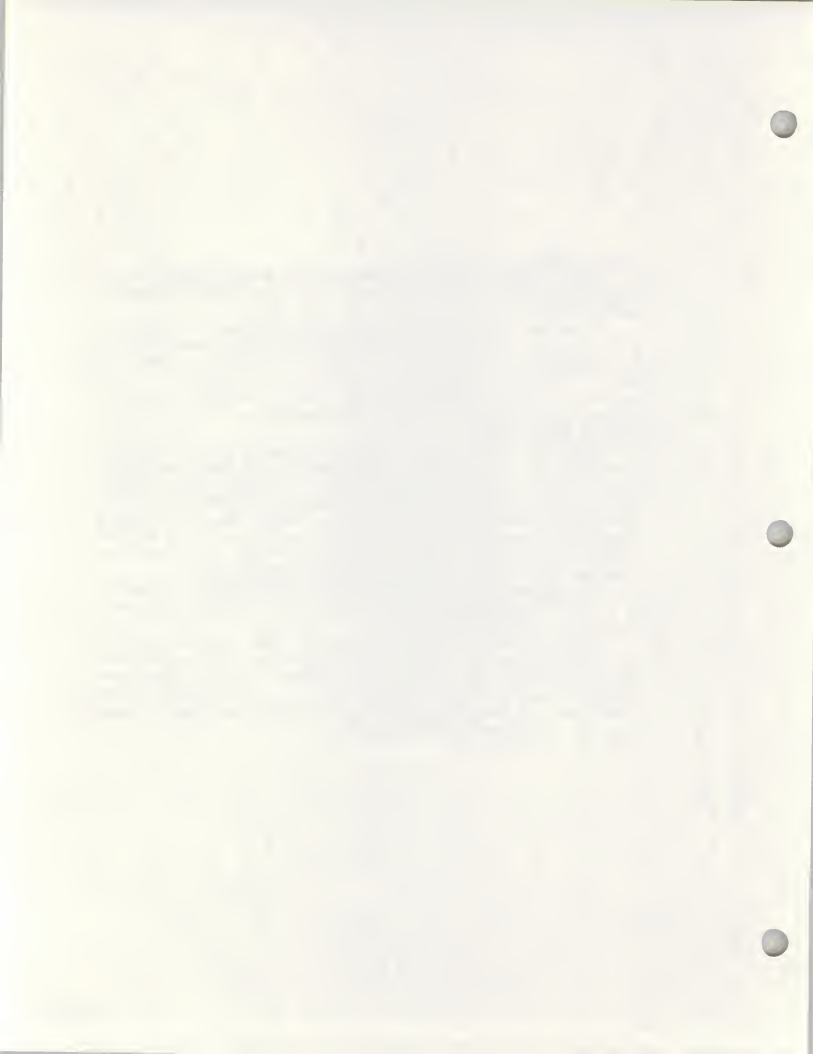
Colonel Philip A. Walker, Jr. was commissioned a Second Lieutenant of Field Artillery in the Regular Army upon graduation from the United States Military on June 8, 1960.

From June 1965 to June 1967, Colonel Walker attended the University of Illinois, where he earned his Master of Science degree in Electrical Engineering. After attending the University of Illinois, he served in the Republic of Vietnam as the Senior Advisor, 1st Battalion. Upon his return in April 1968, he was assigned to the Directorate of Computer Programs, J-5, North American Air Defense Command, where he served as a systems analyst and as Chief of the Technical Support Branch.

From June 1971 to April 1972, Colonel Walker served as a Personnel Staff Officer, Deputy Chief of Staff for Personnel and Administration, Headquarters, United States Army, Vietnam. While awaiting assignment to the Command and General Staff College at Fort Leavenworth, he served as a Special Assistant to the Group Commander. After graduating from C&GSC, Colonel Walker was reassigned to Fort Carson, where he served as S-3 and Executive Officer of the 1st Battalion. Colonel Walker was the Commandant of Training Command, Fort Carson, before assuming command of the 1st Battalion, 19th Field Artillery, 1976.

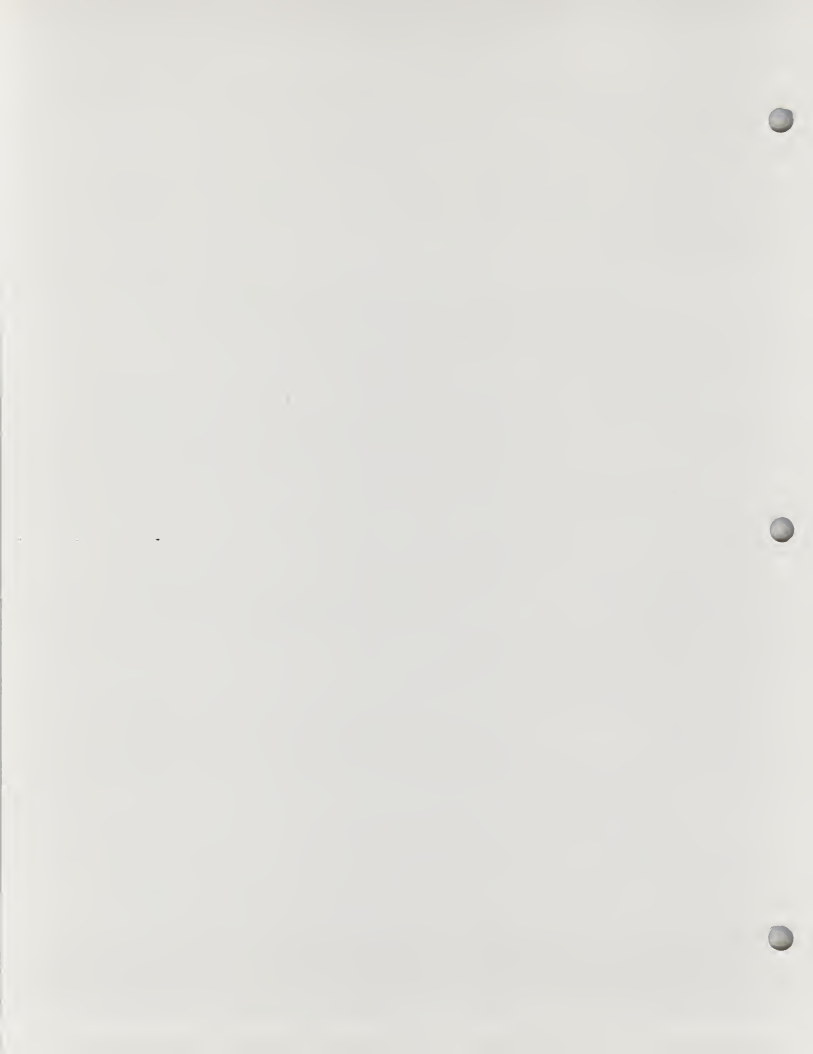
After relinquishing command of his battalion, Colonel Walker was assigned to the Army Automation Directorate in the Office of the Chief of Staff of the Army, from September 1977 to August 1979.

From June 1980 to October 1982, Colonel Walker was assigned as the Development Division Chief, Data Services Directorate, U.S. European Command. His next assignment was a Deputy Commander/Commander, United States Army Computer Systems Command Support Group, Fort Lee, Virginia. His present assignment is as Deputy Commander, United States Information Systems Engineering Command, Fort Belvoir, Virginia.



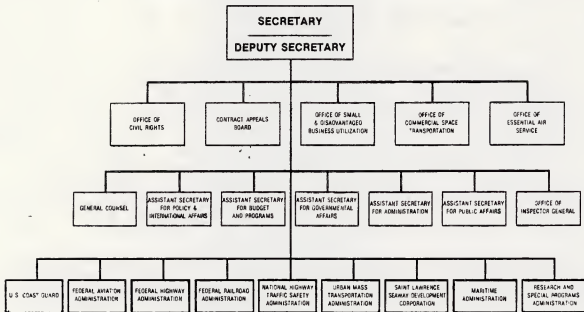
CONNECTIVITY TRENDS IN LARGE FEDERAL AGENCIES

**John E. Turner
Director of Information Systems and
Telecommunications
U.S. Department of Transportation**



- WHERE WE ARE NOW
- WHAT ARE OUR PROBLEMS
- WHERE ARE WE GOING
- HOW ARE WE TO GET THERE
- WHAT ARE OUR ASSUMPTIONS

U.S. DEPARTMENT OF TRANSPORTATION



IRM STATUS

- OPERATIONS VS ADMINISTRATION

COAST GUARD
FAA

- LARGE TELECOMMUNICATION BUDGETS

DEDICATED NETWORKS
VALUE ADDED NETWORKS
ETS DIALUP

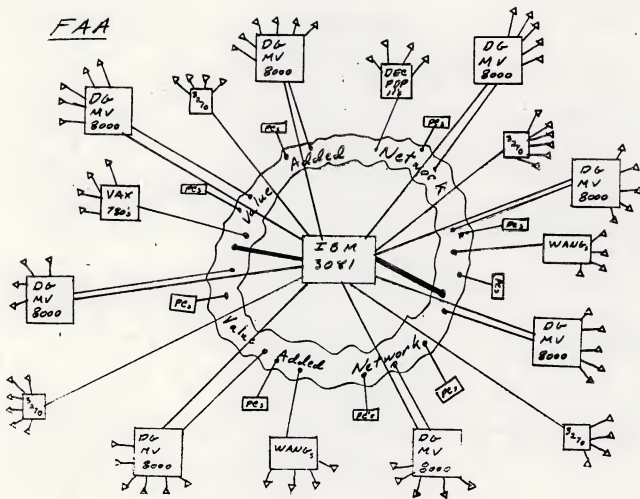
- WIDE RANGE OF COMPUTERS

MANY VENDORS
MANY SIZES
MANY AGES

- LIMITED DOT TECHNICAL CAPABILITY

INCREASED CONTRACTOR SUPPORT

FAA



COMMUNICATIONS

- DOT WIDE - DATA TRANSFER WITH COMMON PROTOCOLS

- EACH OPERATING ADMINISTRATION

INFORMATION TRANSFER

DOCUMENT TRANSFER

INFORMATION NEEDS

- DOT WIDE - COMOMON INFORMATION SYSTEM
 - USED BY ALL
 - PAYROLL/PERSONNEL/ACCOUNTING/PROCUREMENT, etc.
 - CENTRALIZED/HOST PROCESSING

EACH OPERATING ADMINISTRATION

- UNIQUE REQUIREMENTS/FUNCTIONS

PRESENT TO FUTURE ACTIVITIES

- DOT VALUE ADDED NETWORK
 - WHERE APPLICABLE UTILIZE GOVERNMENT-OWNED .
FACILITIES (FAA MICROWAVE)
- MULTI-YEAR REQUIREMENT CONTRACTS FOR OPERATING
ADMINISTRATION WORKSTATION NEEDS
- MULTI-YEAR REQUIREMENT CONTRACTS FOR OPERATING
ADMINISTRATION "DEPARTMENTAL" COMPUTING NEEDS
- REFINEMENT OF HOST MAIN FRAME COMPUTER ACTIVITY (HQS, OKC)

ASSUMPTIONS

- VENDORS WILL CONTINUE TO MOVE CLOSER ON DOCUMENT INTERCHANGE STANDARDS
- IBM COMPATIBILITY WILL CONTINUE TO BE THE HOST SOLUTION
- VALUE ADDED COMMUNICATIONS PROVIDES SECURITY, FLEXIBILITY, COST EFFECTIVENESS
- COMPANIES LIKE SOFTWARE SWITCH CONTINUE TO PROVIDE SOLUTIONS IN A MULTI-VENDOR ENVIRONMENT

FINAL WORD

- NO SIMPLE SOLUTION/NO SINGLE SOLUTION
- PLANNING IS THE KEY
- COST EFFECTIVENESS IS A MUST
- BENEFITS OF AUTOMATION MUST BE SOLD (AND DOCUMENTED)
- COMMUNICATION IS CRITICAL FOR THE FUTURE. FLEXIBILITY IS A MUST
 - HOST TO HOST
 - DISTRIBUTED
 - CENTRALIZED
- COMMUNICATION PROVIDES THE MEANS OF SATISFYING DIVERSE NEEDS

John E. Turner

Mr. Turner is the Director of Information Systems and Telecommunications for the U.S. Department of Transportation. He is responsible for the information resource management policy and direction for the Department. Under the direction of the Single Official, he implements the functions specified by the Paperwork Reduction Act of 1980 including planning, budgeting, organizing, directing, promoting, controlling, and otherwise managing the collection, use, and dissemination of information. This includes automatic data processing, telecommunications, information collection burden on the public, and other paperwork management activities. He is also responsible for the operation of the Transportation Computer Center.

Mr. Turner holds a B.A. degree from Washington State University and an MBA in Management from Oklahoma City University. Prior to his present position, Mr. Turner was Manager of the FAA Data Services Division in Oklahoma City. He has a 22-year background in information systems, including 6 years as a Communications Officer in the Air Force performing computer communication analyst/programming activities.

INPUT[®]

PROCUREMENT POLICY AND REGULATION

**Walter O'Neill
IBM Corporation**

IMPACT
OF
LEGISLATION, REGULATION, POLICY
ON
INFORMATION RESOURCE
PROCUREMENT

° LEGISLATION

- COMPETITION IN CONTRACTING ACT
 - . FULL AND OPEN COMPETITION
 - NON-COMPETITIVE PROCEDURE LIMITATION
 - FUNCTIONAL SPECIFICATION
 - MULTIPLE AWARD SCHEDULE ORDERS
- COMPETITION ADVOCATES
- PROTESTS
 - . GSA BCA AUTHORITY
 - . GAO STATUTORY AUTHORITY

° LEGISLATION

- DEFENSE PROCUREMENT REFORM ACT OF 1984

- SMALL BUSINESS AND COMPETITION ENHANCEMENT ACT
 - . COMMERCIAL PRICING FOR SUPPLIES

 - . RIGHTS IN TECHNICAL DATA

 - . PROCUREMENT NOTICES

- ° REGULATION

- ° FAC 84-10

- INTEGRITY OF UNIT PRICES

- COMMERCIAL PRICING CERTIFICATES

- FULL AND OPEN COMPETITION EXEMPTION
 - CIVILIAN AGENCY MAJOR SYSTEMS
 - GSA MULTIPLE AWARD SCHEDULE ORDERS

- AUDIT RIGHTS

° REGULATION

- FAR CASE 85-39

- DAR CASE 85-187

, COMMERCIAL PRODUCT DEVELOPED AT PRIVATE
EXPENSE EXEMPTION

, DEFINITION OF DATA TO WHICH GOVERNMENT HAS RIGHTS

-- RESTRICTED RIGHTS SOFTWARE

, CERTIFICATION OF DELIVERY

° REGULATION

- FEDERAL INFORMATION RESOURCE MANAGEMENT REGULATION

. AMENDMENT 2 -

-- ADP PERFORMANCE VALIDATION PROVISIONS

. AGENCY MISSION RISK

. AMENDMENT 7-

-- MANAGEMENT OF FEDERAL ADP OBSOLESCENCE

. COST OF OBSOLESCENCE

- ° POLICY

- ° GSA BCA DECISIONS

- DEFINITION OF ADPE

- . 8070-P NAVY vs. JULIE RESEARCH LAB
- . 8333-P GPO/ARMY vs. XEROX, VOLT, AT&T

- REQUIREMENT SPECIFICATION

- . 7927-P DLA vs. MEMOREX
- . 7948-P NASA vs. INTERNATIONAL SYSTEMS MARKETING

- WARNER AMENDMENT EXCLUSION

- . 8070-P NAVY vs. JULIE RESEARCH LAB

- ADPE SUPPORT SERVICES AUTHORITY

- . 8071-P GSA vs. SMC INFORMATION SYSTEMS
- . 8081-P ARMY vs. SDA FEDERAL SYSTEMS

° POLICY

- OMB CIRCULAR A-130 -

- . MANAGEMENT OF FEDERAL INFORMATION RESOURCES
- . UP-TO-DATE INFORMATION PROCESSING TECHNOLOGY
- . PROGRAM MANAGER RESPONSIBILITY
 - CENTRAL COMPUTER MONOPOLIES
 - OFF-THE-SHELF SOFTWARE
- . NECESSARY COMPATIBILITY OF INFORMATION SYSTEMS
- . COST OF COMPETITIVE PROCUREMENT

° LEGISLATION

- CURRENT BILLS

. S2196 - COMMERCIAL PRICING FOR SPARE OR REPAIR
PARTS

. S2030/HR4086 - PROCUREMENT SAFEGUARD
ACT OF 1986

. S2008 - SIMPLIFIED COMPETITIVE ACQUISITION
TECHNIQUE

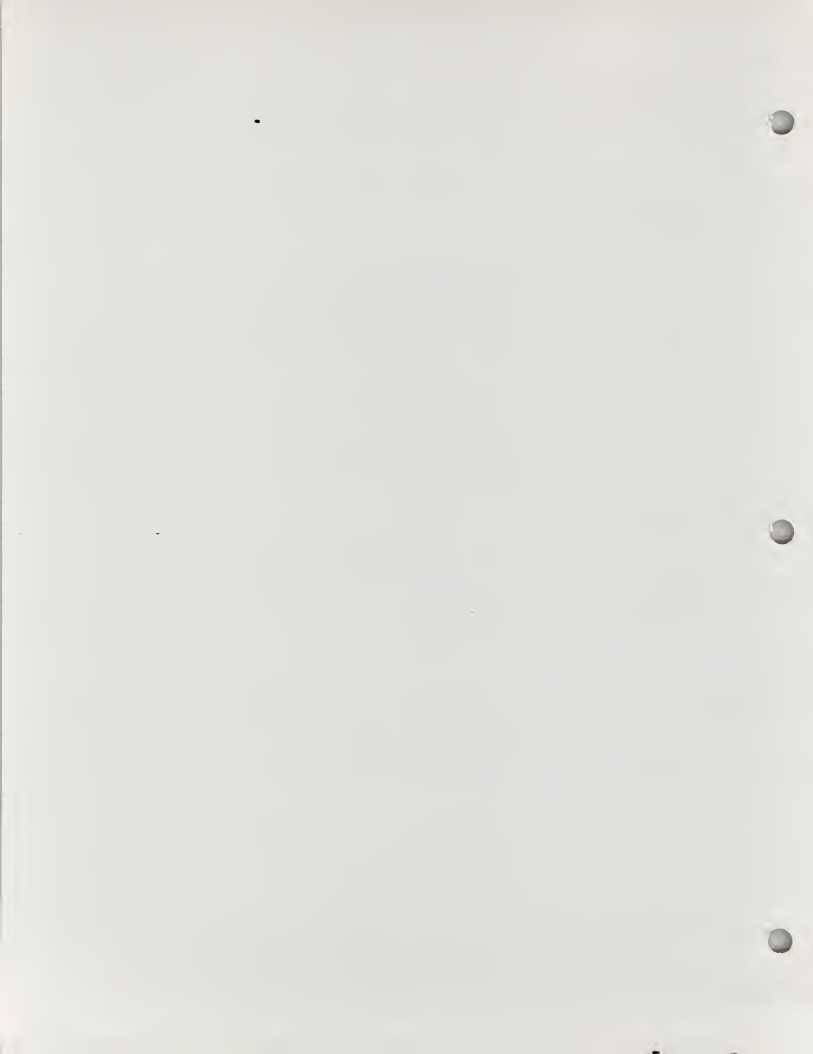
Walter O'Neill

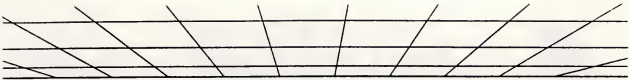
Mr. O'Neill joined IBM Corporation 25 years ago. He currently holds the position of Government Business Relation Consultant. His prime area of interest is federal government commercial product procurement legislation, regulation, and policy.

Mr. O'Neill serves as the chairman of CBEMA GSA Procurement Subcommittee. He is also the chairman of ADAPSO Policy and Regulations Subcommittee. Mr. O'Neill has two degrees in mathematics from Boston College.

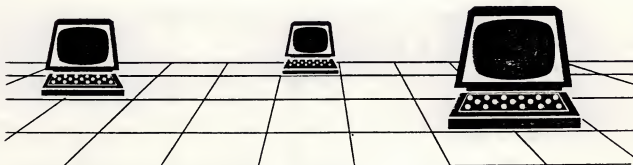
END-USER COMPUTING TRENDS

Irene Bayol
Policy Officer
Office of the Deputy Commissioner for
Federal Information Resources Management
General Services Administration





Survey of 100 Federal Microcomputer Users





Survey of 100 Federal Microcomputer Users

Purpose

- **Determine Experiences**
- **Share Lessons Learned**
- **Help Determine Policy Direction
in Late 1980's**



Survey of 100 Federal Microcomputer Users

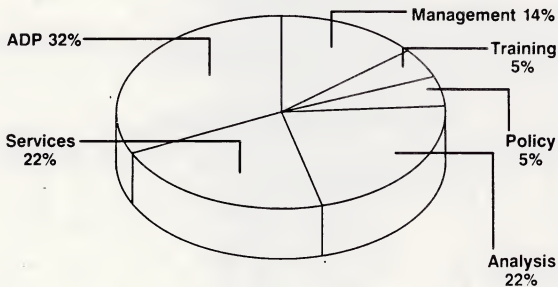
Method

- **Designated IRM Officials**
- **387 Microcomputer Users**
- **208 Responses**



Survey of 100 Federal Microcomputer Users

Program Mission





Survey of 100 Federal Microcomputer Users

Type Training

Formal

101

OJT

55

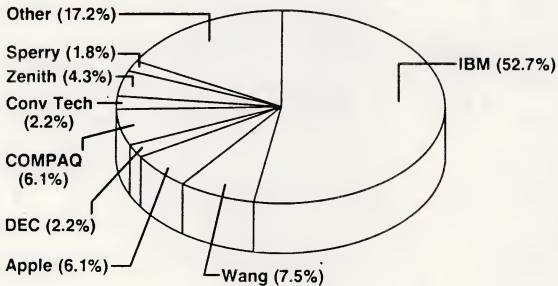
Self Study

78



Survey of 100 Federal Microcomputer Users

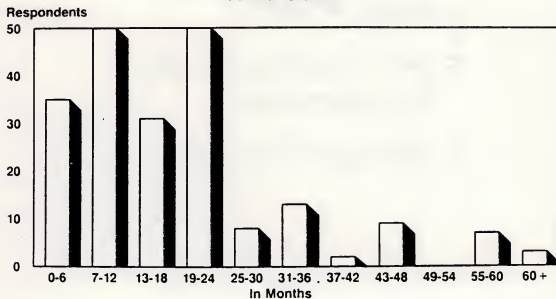
Micros in Use by Manufacturer





Survey of 100 Federal Microcomputer Users

Time Used





Lessons Learned

59 Better Planning

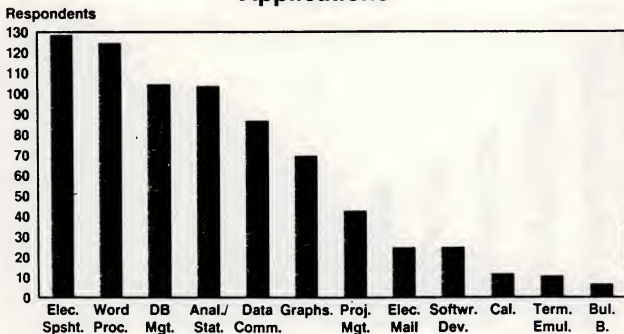
**16 Prior Identification of
Requirements**

12 Contact Other Users



Survey of 100 Federal Microcomputer Users

Applications

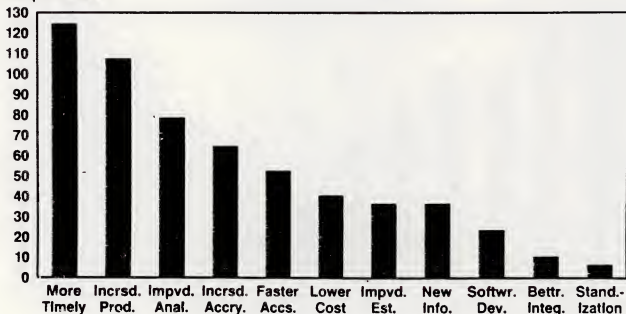




Survey of 100 Federal Microcomputer Users

Benefits

Respondents

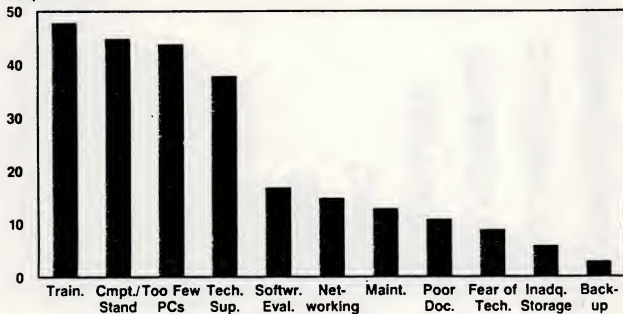




Survey of 100 Federal Microcomputer Users

Problems

Respondents

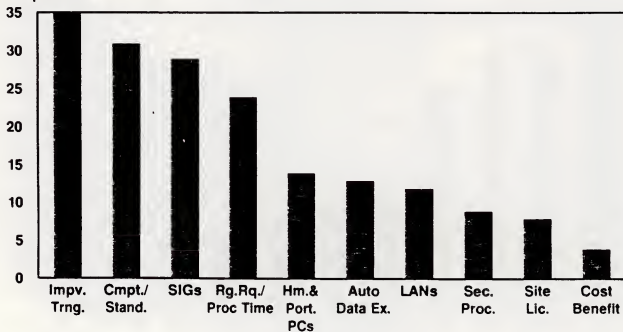




Survey of 100 Federal Microcomputer Users

Recommendations

Respondents





Survey of 100 Federal Microcomputer Users

Future Plans

	<u>Increased Usage</u>	<u>Local Network</u>	<u>Mainframe Link</u>	<u>Electronic Mail</u>	<u>Bulletin Board</u>
Number of Respondents	134	47	32	17	7



Agency Actions

- **Improve Training**
- **Improve Technical Support**
- **Ensure Sufficient Quantities of Machines**
- **Plan for Integration of Machines and Data**
- **Improve Planning**



GSA Actions

- **Bring Attention to Need for Improved Training**
- **Review the Need for Local Area Network Policies**
- **Work With Federal Groups to Establish Special Interest Groups**
- **Publicize Existing Security Procedures**
- **Evaluate Site Licensing**
- **Review Regulations Requirements/Procurement Time**
- **Review Excess/Disposal Policies**

Irene Bayol

Irene Bayol is Policy Officer for the Office of the Deputy Commissioner for Federal Information Resources Management, U.S. General Services Administration (GSA). This office is responsible for overseeing all the governmentwide policy making activities of this organization. This includes writing regulations, providing delegations of procurement authority, governmentwide planning, and reviewing agency performance. These functions are performed in all information resources management areas in the government including automatic data processing (ADP), telecommunications, and records management.

Previous GSA positions were: Senior automatic data processing and telecommunications specialist (information resources management specialist) for the GSA Institute for the Application of Information Technology. Acting Chief of the Authorizations Branch where she was responsible for the supervision, management and direction of the governmentwide ADP delegations program and telecommunications regulatory approval to Federal agencies for the acquisition of ADP telecommunications resources. Chief, Excess Equipment Section where she directed, managed, and controlled the federal worldwide Automatic Data Processing Equipment (ADPE) Reutilization Program.

Prior to joining GSA, Irene held various positions with the U.S. Air Force in the Pentagon. The major ones were as a computer equipment specialist where she was responsible for the Air Force worldwide ADPE Reutilization Program, and as a program analyst where she was responsible for the development of management information on major Air Force programs for inclusion in the Air Force Management Summary.

Ms. Bayol attended the University of Virginia and American University.

**FEDERAL INFORMATION SYSTEMS
AND SERVICES PROGRAM**

DIALOGUE:

FY 1987 RESEARCH DIRECTIONS

INPUT

INPUT'S FEDERAL PROGRAM

GIVES YOU ...

- . Enhanced Marketing Support
- . A Head Start on the Competition
- . Qualified Prospects
- . Reduced Marketing Costs
- . Improved Return on Bidding Investment
- . Focused Business Development

INPUT

FY 1987 RESEARCH PROGRAM

- . Library**
- . Hotline**
- . Procurement Analysis Reports (PAR)**
- . Market Analysis Reports (MAR)**

INPUT

LIBRARY

- . Agency A-11 Data
- . Agency Long Range Plans
- . FAR and DAR Information
- . Special Agency Reports

INPUT

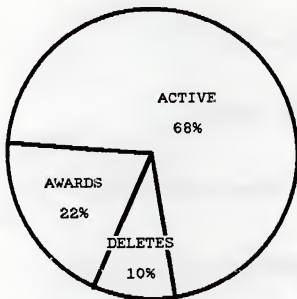
HOTLINE

- . PAR Queries
- . MAR Queries
- . Other Federal Queries
- . Competitive Information
- . Contract Information
- . Government Source Identification

INPUT

PROCUREMENT ANALYSIS REPORTS

PROGRAM STATISTICS



- . As of May 1986, the PAR included approximately 600 programs

INPUT

PROCUREMENT ANALYSIS REPORTS

FY 1987 PLAN

- . Update Current Descriptions
- . Add New FY87 - 91 Programs
- . Update Awards/Deletions Biannually
- . Release Descriptions Monthly
- . Revise Index Biannually

INPUT

7gov6cw

PROCUREMENT ANALYSIS REPORTS

AUTOMATION

- . Local Publishing
- . Machine-Readable Program Descriptions
- . Possible Delivery Mechanisms
 - Personal Computer
 - Mainframe Media
 - Subscription Search Service

MARKET ANALYSIS REPORTS

POTENTIAL TOPICS FOR FY 1987

. New

- Ada
- AI
- Justice
- NASA
- FDPCs
- Hardware Maintenance
- Training & Education
- LANs
- Micro-Mainframe Links
- Software Products

. Updates

- Treasury
- Facilities Management
- Processing Services
- Professional Services

. Client Suggestions

INPUT

FEDERAL INFORMATION SYSTEMS AND SERVICES PROGRAM

FY 1987 RESEARCH

- . Client - Directed
- . Responsive
- . Timely
- . Program - Specific

INPUT